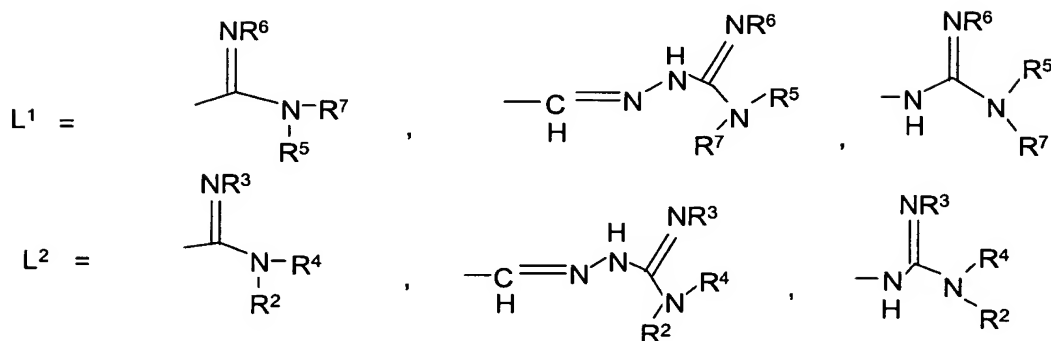
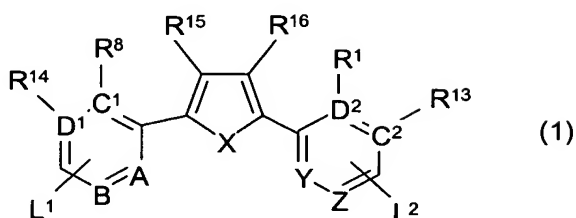


CLAIMS

What is claimed is:

1. A compound of Formula (I):



5

wherein:

X is selected from the group consisting of O, S, and NR^{17} , where R^{17} is hydrogen or lower alkyl;

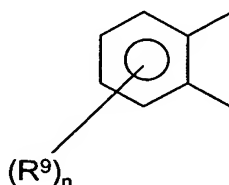
10 C^1 , C^2 , A, and Y are CH, N, NR^{17} , O, or S, wherein C^1 and C^2 are the same or different;

D^1 , D^2 , B, and Z are CH, N, or NR^{17} wherein D^1 and D^2 are the same or different; provided that B, Z, or both B and Z are not present when A, Y, or both A and Y are O, S, or NR^{17} ;

15 R^{13} , R^{14} , R^{15} , R^{16} , R^1 and R^8 are selected from the group consisting of H, lower alkyl, halogen, alkoxyl, aryloxy, aralkoxy and hydroxyl;

R^3 and R^6 are each independently selected from the group consisting of H, hydroxy, lower alkyl, cycloalkyl, aryl, aralkyl, alkoxyl, hydroxycycloalkyl, alkoxycycloalkyl, hydroxyalkyl, aminoalkyl, acyloxy, acetoxy, and alkylaminoalkyl;

and R^2 , R^4 , R^5 and R^7 are each independently selected from the group consisting of H, lower alkyl, alkoxyalkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, aminoalkyl, and alkylaminoalkyl, or R^2 and R^4 together or R^5 and R^7 together represent a C_2 to C_{10} alkyl, hydroxyalkyl, or alkylene, or R^3 and R^4 together or R^6 and R^7 together are:



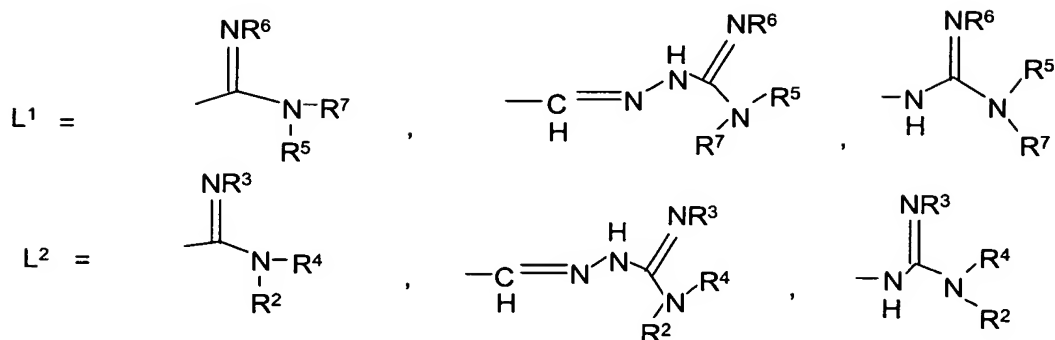
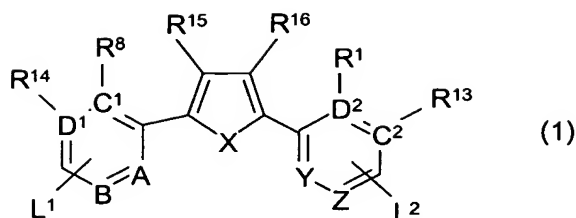
wherein n is a number from 1 to 3, and R^9 is H or $-\text{CONHR}^{10}\text{NR}^{11}\text{R}^{12}$, wherein R^{10} is lower alkyl and R^{11} and R^{12} are each independently selected from the group consisting of H and lower alkyl.

2. The compound of claim 1, wherein A and B are different and N or CH; Y and Z are CH; X is O or S; R^2 , R^4 , R^5 , and R^7 are each H; and R^1 , R^3 , R^6 and R^8 are selected from the group consisting of H, OH, methyl, methoxy, and acetoxy.

3. The compound of claim 1, wherein A and B are CH; X is O; Y is O; R^2 , R^4 , R^5 , and R^7 are each H; and R^1 , R^3 , R^6 and R^8 are selected from the group consisting of H, OH, methyl, methoxy, and acetoxy.

4. The compound of claim 1, further comprising a pharmaceutically acceptable carrier.

5. A method of treating microbial infection in a subject in need thereof, the method comprising administering to the subject an effective amount of a compound of Formula (I):



wherein:

5 X is selected from the group consisting of O, S, and NR^{17} , where R^{17} is hydrogen or lower alkyl;

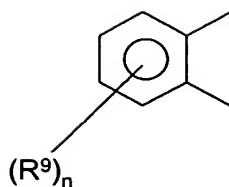
C^1 , C^2 , A, and Y are CH, N, NR^{17} , O, or S, wherein C^1 and C^2 are the same or different;

10 D^1 , D^2 , B, and Z are CH, N, or NR^{17} wherein D^1 and D^2 are the same or different; provided that B, Z, or both B and Z are not present when A, Y, or both A and Y are O, S, or NR^{17} ;

R^{13} , R^{14} , R^{15} , R^{16} , R^1 and R^8 are selected from the group consisting of H, lower alkyl, halogen, alkoxyl, aryloxy, aralkoxy and hydroxyl;

15 R^3 and R^6 are each independently selected from the group consisting of H, hydroxy, lower alkyl, cycloalkyl, aryl, aralkyl, alkoxyl, hydroxycycloalkyl, alkoxycycloalkyl, hydroxyalkyl, aminoalkyl, acyloxy, acetoxy, and alkylaminoalkyl; and R^2 , R^4 , R^5 and R^7 are each independently selected from the group consisting of H, lower alkyl, alkoxyalkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, aminoalkyl, and alkylaminoalkyl, or R^2 and R^4 together or R^5 and R^7 together represent a C_2 to C_{10} alkyl, hydroxyalkyl, or alkylene, or R^3 and R^4 together or R^6

and R⁷ together are:



5 wherein n is a number from 1 to 3, and R⁹ is H or –CONHR¹⁰NR¹¹R¹², wherein R¹⁰ is lower alkyl and R¹¹ and R¹² are each independently selected from the group consisting of H and lower alkyl.

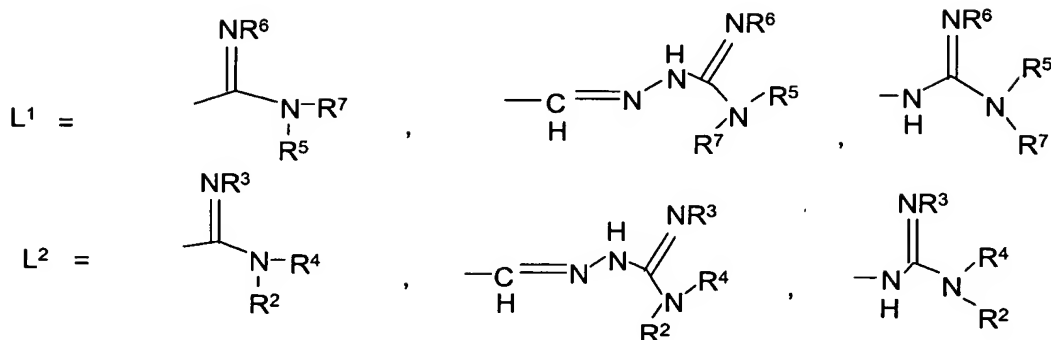
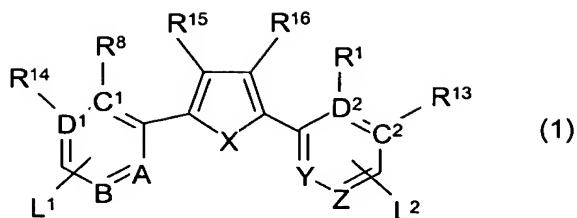
6. The method of claim 5, wherein A and B are different and N or CH; Y and Z are CH; X is O or S; R², R⁴, R⁵, and R⁷ are each H; and R¹, R³, R⁶, and R⁸ are selected from the group consisting of H, OH, methyl, methoxy, and
10 acetoxy.

7. The method of claim 5, wherein A and B are CH; X is O; Y is O; R², R⁴, R⁵, and R⁷ are each H; and R¹, R³, R⁶, and R⁸ are selected from the group consisting of H, OH, methyl, methoxy, and acetoxy.

8. The method of claim 5, wherein the microbial infection is a
15 *Trypanosoma brucei rhodesiense* infection or a *Plasmodium falciparum* infection.

9. A pharmaceutical formulation comprising:

(a) a compound of Formula (I):



wherein:

5 X is selected from the group consisting of O, S, and NR^{17} , where R^{17} is hydrogen or lower alkyl;

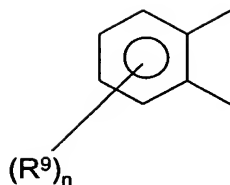
C^1 , C^2 , A, and Y are CH, N, NR^{17} , O, or S, wherein C^1 and C^2 are the same or different;

10 D^1 , D^2 , B, and Z are CH, N, or NR^{17} wherein D^1 and D^2 are the same or different; provided that B, Z, or both B and Z are not present when A, Y, or both A and Y are O, S, or NR^{17} ;

R^{13} , R^{14} , R^{15} , R^{16} , R^1 and R^8 are selected from the group consisting of H, lower alkyl, halogen, alkoxyl, aryloxy, aralkoxy and hydroxyl;

15 R^3 and R^6 are each independently selected from the group consisting of H, hydroxy, lower alkyl, cycloalkyl, aryl, aralkyl, alkoxyl, hydroxycycloalkyl, alkoxycycloalkyl, hydroxyalkyl, aminoalkyl, acyloxy, acetoxy, and alkylaminoalkyl; and R^2 , R^4 , R^5 and R^7 are each independently selected from the group consisting of H, lower alkyl, alkoxyalkyl, cycloalkyl, aryl, aralkyl, hydroxyalkyl, aminoalkyl, and alkylaminoalkyl, or R^2 and R^4 together or R^5 and R^7 together represent a C_2 to C_{10} alkyl, hydroxyalkyl, or alkylene, or R^3 and R^4 together or R^6

and R⁷ together are:



5 wherein n is a number from 1 to 3, and R⁹ is H or -CONHR¹⁰NR¹¹R¹², wherein R¹⁰ is lower alkyl and R¹¹ and R¹² are each independently selected from the group consisting of H and lower alkyl; and

(b) a pharmaceutically acceptable carrier.

10 10. The pharmaceutical formulation of claim 9, wherein A and B are different and N or CH; Y and Z are CH; X is O or S; R², R⁴, R⁵, and R⁷ are each H; and R¹, R³, R⁶, and R⁸ are selected from the group consisting of H, OH, methyl, methoxy, and acetoxy.

15 11. The pharmaceutical formulation of claim 9, wherein A and B are CH; X is O; Y is O; R², R⁴, R⁵, and R⁷ are each H; and R¹, R³, R⁶, and R⁸ are selected from the group consisting of H, OH, methyl, methoxy, and acetoxy.